

Matthew Senick

EXPERIENCE

Senior Data Analyst (Product Growth)

Mar 2023 - Present

7shifts

Saskatoon, SK

- Set best practices within the team for analytical engineering and owned analytical engineering from a number of disparate data sources including Ada, Appcues, Marketo, and Zendesk
- Applied Long-Short Term Memory Neural Networks to project customer lifetime value for existing customers, and predict customer lifetime value for new customers
- Used Prefix Tree Spanning to map out common patterns in the action journeys taken by customers during their initial trial period

Data Analyst (Product Growth)

Jun 2023 - Feb 2023

7shifts

Saskatoon, SK

- Drove ML engineering in the deployment of the company's first customer churn prediction model, and supported the rollout of predictions to the Sales team
- Deployed a data ingestion script via Airflow to collect Google Places information on provided customer locations with an 80% location match rate
- Completely refactored and migrated DBT analytic engineering layers to Snowflake for Stripe billing, impacting over \$80 million in customer transaction data
- Genetically optimized a Hidden Markov Model which leveraged over 9 million customer trial actions with the intent of uncovering causal impact of actions to customer purchase decisions
- Owner of A/B test analysis, including but not limited to the following product areas: pricing page, plan trials, and the initial trial experience

Lecturer (Economics)

Sep 2022 - Present

University of Saskatchewan

Saskatoon, SK

- Nominated for the Undergraduate Student Society Teaching Excellence Award
- Achieved a 100% satisfaction rate on "Overall Teaching Effectiveness" during my first semester, with 46% of students rating my teaching effectiveness amongst the top 5% of university instructors

Business Process Data Scientist (Strategic Projects)

Jul 2022 - Jun 2023

StandardAero

Winnipeg, MB

- Spearheaded development of a Monte Carlo simulation that assessed risk distributions for quoting incoming engine contracts frequently exceeding \$2 million, impacting 1000+ employees and recognized with an intracompany award
- Developed cross-functional Discrete Event Simulations and dashboards to optimize production engineering metrics, enabling key decision makers to compare the forecasted impact of workflow and labour composition changes

Research Assistant (Economics)

Dec 2021 - May 2022

University of Toronto

Toronto, ON

- Built supervised and unsupervised web-scraping NLP models to quantify amenity preference sentiment amongst labour force actors which were presented at ASSA 2022

Teaching Assistant (Economics)

Aug 2021 - May 2022

University of Toronto

Toronto, ON

- Led students in "Data Tools for Economists" and "Introduction to Data Analysis and Applied Econometrics"
- Obtained a 96% satisfaction rate in tutorial sessions for students learning data manipulation/analysis techniques

Development and Database Manager (BI and Automation)

May - Sep 2020, May - Aug 2021

Affinity Credit Union

Saskatoon, SK

- Led a data analysis project regarding reporting server standards and create tangible reports regarding data usage

Intern Market Analyst (Member Experience)

Jan 2020 - Apr 2020

Affinity Credit Union

Saskatoon, SK

- Built a decision tree model to predict consumer product tendencies based on thousands of biographic data points

Research Assistant (Computer Science)

May 2019 - Sep 2019

University of Saskatchewan

Saskatoon, SK

- Aided in implementing and testing machine learning solutions for 'semantic code clone' detection research

EDUCATION

University of Toronto

Aug 2021 - May 2022

Master of Economics

Toronto, ON

- Relevant Coursework: Economic Applications of Machine Learning (A+), Statistical Methods for Machine Learning and Data Mining (A), Econometrics (A-)

University of Saskatchewan

Sept 2017 - May 2021

Double Honours Bachelor in Economics and Computer Science

Saskatoon, SK

- cGPA: 3.87
- Awards: Lewis C. Gray Prize in Economics, Popoff Scholarship in Economics, Dean's Honour List, University of Saskatchewan Continuing Scholarship, NSERC Undergraduate Research Award, Greystone Entrance Award
- Relevant Coursework: Introduction to Empirical Economics (100%), Deep Learning (87%), Machines & Algorithms (94%), Simulation Principles (91%)

TECHNICAL SKILLS

Skills: Machine Learning, Simulation, Econometric Analysis, Research Techniques, A/B Testing, Analytical Engineering

Programming Languages: Python, SQL, R, DBT, Stata, C, Java, JavaScript, C++

Libraries: TensorFlow, Scikit-learn, Pytorch, Pandas, Selenium, Gensim, NLTK

Programs/Tools: DBT, Git, Tableau, Power BI, Anylogic, Weka, SQL Server, Jupyter, iGrafx, Salesforce, Snowflake, Metabase, Mixpanel, Growthbook

Hobbies: Golf, Hockey, Chess, Freelance Web-Development